

Church Road. The speed limit along this two-lane undivided cross-section, approximately twenty feet in width is 55 mph.

### **Existing Conditions**

2003 AADT volumes along Optimist Club Road ranged from 2,900 vpd to 3,000 vpd. With a current practical capacity of 11,000 vpd, the existing ratio of traffic volume to practical capacity ranges from 0.26 to 0.27, meaning Optimist Club Road is currently operating at levels satisfactory to users.

### **Projected Conditions**

Traffic projected on Optimist Club Road for the year 2030 ranges from 6,800 vpd to 7,900 vpd, which is well under the current practical capacity.

- **System Linkages**

#### **Existing Roadway Networks**

Optimist Club Road provides access from NC 16 to St. James Church Road.

#### **Transportation Plans**

Optimist Club Road is designated as an on-road bicycle facility on the CTP. The existing roadway will need to be widened to a two-lane undivided roadway with four-foot shoulders in order to achieve this type of facility in the future.

#### **Modal Interrelationships**

Optimist Club Road connects to the proposed Fairfield Forest Road Path and the Killian Creek off-road bicycle facility.

- **Social, Economic, and Environmental Conditions Networks**

#### **Demographics**

The existing minority population along Optimist Club Road is the county average, while the income level is about 75% below the county average.

#### **Economic Data**

Currently, the land surrounding Optimist Club Road contains single family residences. Although no commercial development is proposed in this area, residential development is possible.

#### **Environmental**

There are several wetlands included in the National Wetland Inventory along Optimist Club Road. There are no other known natural environmental features in this area. The human environment along Optimist Club Road includes the East Lincoln County park.

- **Cost Estimates**

The cost estimate for this recommendation is based on widening the existing roadway to NCDOT standards, adding an additional four foot shoulder for bicyclists, and mitigating for possible impacts to wetlands. The cost estimate for this recommended facility is \$9,589,300.